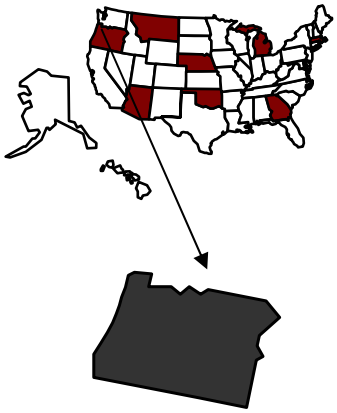

THE HEALTH CARE WORKFORCE IN EIGHT STATES: EDUCATION, PRACTICE AND POLICY

Spring 2004

OREGON

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The Health Care Workforce in Eight States: Education, Practice and Policy

PROJECT DESCRIPTION

Historically, both federal and state governments have had a role in developing policy to shape the health care workforce. The need for government involvement in this area persists as the private market typically fails to distribute the health workforce to medically underserved and uninsured areas, provide adequate information and analysis on the nature of the workforce, improve the racial and ethnic cultural diversity and cultural competence of the workforce, promote adequate dental health of children, and assess the quality of education and practice.

It is widely agreed that the greatest opportunities for influencing the various environments affecting the health workforce lie within state governments. States are the key actors in shaping these environments, as they are responsible for:

- financing and governing health professions education;
- licensing and regulating health professions practice and private health insurance;
- purchasing services and paying providers under the Medicaid program; and
- designing a variety of subsidy and regulatory programs providing incentives for health professionals to choose certain specialties and practice locations.

Key decision-makers in workforce policy within states and the federal government are eager to learn from each other. This initiative to compile in-depth assessments of the health workforce in 8 states is an important means of insuring that states and the federal government are able to effectively share information on various state workforce data, issues, influences and policies.

Products of this study include individual health workforce assessments for each of the eight states and a single assessment that compares various data and influences across the eight states. In general, each state assessment provides the following:

1) A summary of health workforce data, available resources and a description of the extent the state invests in collecting workforce data. [Part of this information has been provided by the Bureau of Health Professions];
2) A description of various issues and influences affecting the health workforce, including the state's legislative and regulatory history and its current programs, financing and policies affecting health professions education, service placement and reimbursement, planning and monitoring, and licensure/regulation;
3) An assessment of the state's internal capacity and existing strategies for addressing the above workforce issues and influences; and
4) An analysis of the policy implications of the state's current workforce data, issues, capacity and strategies.

The development of the project's data assimilation strategy, content and structure was guided by an expert advisory panel. Members of the advisory panel included both experts in state workforce policy (i.e., workforce planners, researchers and educators) and, more broadly, influential state health policymakers (i.e., state legislative staff, health department officials). The advisory panel has helped to ensure the workforce assessments have an appropriate content and effective format for dissemination and use by both state policymakers and workforce experts/officials.

STUDY METHODOLOGY

Study Purpose and Audience

Key decision-makers in workforce policy within states and the federal government are eager to learn from each other. Because states increasingly are being looked to by the federal government and others as proving grounds for successful health care reform initiatives, new and dynamic mechanisms for sharing innovative and effective state workforce strategies between states and with the federal government must be implemented in a more frequent and far reaching manner. This initiative to compile comprehensive capacity assessments of the health workforce in 8 states is an important means of insuring that states and the federal government are able to effectively share information on various state workforce data, issues and influences.

Each state workforce assessment report is not intended to be voluminous; rather, information is presented in a concise, easy-to-read format that is clearly applicable and easily digestible by busy state policymakers as well as by workforce planners, researchers, educators and regulators.

Selection of States

NCSL, with input from HRSA staff, developed a methodology for identifying and selecting 8 states to assess their health workforce capacity. The methodology included, but was not limited to, using the following criteria:

a. States with limited as well as substantial involvement in one or more of the following areas: statewide health workforce planning, monitoring, policymaking and research;
b. States with presence of unique or especially challenging health workforce concerns or issues requiring policy attention;
c. States with little involvement in assessing health workforce capacity despite the presence of unique or especially challenging health workforce concerns or issues requiring policy attention;
d. Distribution of states across Department of Health and Human Services regions;
e. States with Bureau of Health Professions (BHPr) - supported centers for health workforce research and distribution studies;
f. States with primarily urban and primarily rural health workforce requirements; and
g. States in attendance at BHPr workforce planning workshops or states that generally have interest in workforce modeling.

Collection of Data

NCSL used various means of collecting information for this study. Methods exercised included:

a. Phone and mail interviews with state higher education, professions regulation, and recruitment/retention program officials;
b. Custom data tabulations by national professional trade associations and others (i.e., Quality Resource Systems, Inc.; Johns Hopkins University School of Public Health) with access to national data bases;
c. Tabulations of data from the most recent edition of federal and state government databases (e.g., National Health Service Corps field strength);
d. Site visit interviews with various officials in the eight profile states;
e. Personal phone conversations with other various state and federal government officials;
f. Most recently available secondary data sources from printed and online reports, journal articles, etc.; and
g. Comments and guidance from members of the study's expert advisory panel.

STATE SUMMARY

Oregon, though quickly and steadily becoming more urban, remains largely rural in the eastern part of the state. As of the 2000 census, the proportion of the population that is minority or ethnic was about half the national average, although a rapidly rising Asian-origin population is evident.

Access to basic primary health care in the state's health professional shortage areas (HPSAs) is quite limited. The percent of the population residing in primary care HPSAs is much below the national average. The proportion of the non-elderly and children without health insurance in Oregon mirrors the national average. However, recent changes to the Oregon Health Plan, the state's Medicaid program, due to state budget problems and other issues, have resulted in a reduction in coverage for many services and eligibility for numerous beneficiaries. Worsening state budget problems are requiring across-the-board cuts to most state programs, forcing further funding reductions in many health professions training programs and provider recruitment and retention initiatives.

The state appears to suffer an overall shortage as well as maldistribution of physicians and pharmacists. Oregon's per capita supply of nurses, dentists and dental hygienists equals or exceeds national averages.

Concerns about current or emerging shortages of certain health professionals in the state—including nurses, physicians and various allied health personnel—prompted the legislature in 2001 to create the Interim Task Force on Health Care Personnel. The task force's charge was to propose recommendations for solving the growing shortages. The task force's interest in better understanding the status of the Oregon's health workforce led the Governor to convene a summit in 2002 to highlight best and promising practices to improve the health workforce, and supported the state's Area Health Education Centers program to produce a series of profession-specific health workforce profiles in 2002.

Oregon's supply of physicians is flat or in decline for the first time since the 1970s. Reports suggests that the state's physician supply is hampered by the fact that a significant proportion of graduates of Oregon's one medical school ultimately leave the state to practice and only about a quarter of all practicing physicians in the state went to medical school in Oregon.

Another outgrowth of the work of the Interim Task Force on Health Care Personnel was a greater awareness of a growing nurse shortage in Oregon and the proposal of a series of initiatives to improve nursing supply. Although the state's nursing workforce is better understood, there is a consensus that the growing nursing shortage is largely associated with an insufficient capacity of nurse training programs. This realization was addressed, beginning in the early 2000's, with the formation of a coalition of major nursing groups in the state whose primary aim was to improve and expand nursing education. The effort to expand the number of nurses trained has involved the creation of new partnerships between nursing programs at Oregon Health Sciences University and the state's 11 community colleges which offer nurse training. These partnerships operate under the Oregon Consortium for Nursing Education.

Although there is growing concern that Oregon faces an overall shortage of dentists in the future, oral health experts agree that the state's dental workforce shortage currently is largely a maldistribution problem. The maldistribution of dentists and dental hygienists in rural areas is becoming particularly acute. Similar to other states, a large number of dentists are nearing retirement and many retiring rural dentists are unable to find someone to take over their practice.

I. WORKFORCE SUPPLY AND DEMAND

Arguably, it is most important initially to understand the marketplace for a state's health care workforce. How many health professionals are in practice statewide and in medically underserved communities? What are the demographics of the population served? How is health care organized and paid for in the state? This section attempts to answer some of these questions by presenting state-level data collected from various sources.

Table I-a.

POPULATION		OR	U.S.
Total Population (2001)		**3,472,667**	284,796,887
Sex (2000)	% Female	**50.4**	50.9
	% Male	**49.6**	49.1
Age (2000)	% less than 18	**24.7**	25.7
	% 18-64	**62.5**	61.9
	% 65 or over	**12.8**	12.4
% Minority/Ethnic (2002)		**15.6**	30.9
% Metropolitan (2002)		**71.2**	81.3

Sources: U.S. Census Bureau, AARP.

Only fifteen percent of Oregon's population are minorities.

Table I-b.

PROFESSION UTILIZATION	OR	U.S.
% Adults who Reported Having Routine Physical Exam Within Past Two Years (1997)	**80.7**	83.2 (Median)
Average # of Retail Prescription Drugs per Resident (2002)	**9.4**	10.6
% Adults who Made Dental Visit in Preceding Year by Annual Family Income (1999):		
Less than $15,000	**54**	
$15,000 - $34,999	**64**	
$ 35,000 or more	**77**	

Sources: CDC, AARP, GAO.

Eighty percent of Oregon adults reported having a routine physical exam within the past two years.

Table I-c.

ACCESS TO CARE		OR	U.S.
% Non-elderly (under age 65) Without Health Insurance	2000-2001	**14**	17
	1999-2000	**16**	16
% Children Without Health Insurance	2000-2001	**11**	12
	1999-2000	**13**	12
% Not Obtaining Health Care Due to Cost (2000)		**12.7**	9.9
% Living in Primary Care HPSA (2003)		**14.8**	21.3
# Practitioners Needed to Remove Primary Care HPSA Designation (2003)		**52**	--
% Living in Dental HPSA (2003)		**22.2**	14.7
# Practitioners Needed to Remove Dental HPSA Designation (2003)		**111**	--

HPSA = Health Professional Shortage Area

Sources: KFF, AARP, BPHC-DSD.

Oregon has over one-fifth of its population living in dental HPSAs and needs over one hundred practitioners to remove the Dental HPSA designation.

Table I-d.

PROFESSIONS SUPPLY				
Profession		**# Active Practitioners**	**# Active Practitioners per 100,000 Population**	
			OR	**U.S.**
Physicians (1998)		**6,305**	**192.1**	198
Physician Assistants (1999)		**252**	**7.6**	10.4
Nurses	RNs (2000)	**30,369**	**793**	782
	LPNs (1998)	**4,520**	**137.7**	249.3
	CNMs (2000)	**131**	**3.9**	2.1
	NPs (1998)	**1,280**	**39.0**	26.3
	CRNAs (1997)	**176**	**5.4**	8.6
Pharmacists (1998)		**1,970**	**60.0**	65.9
Dentists (1998)		**1,805**	**55.0**	48.4
Dental Hygienists (1998)		**3,090**	**94.1**	52.1
% Physicians Practicing Primary Care			**33.0** (30.0 U.S.)	
% Registered Nurses Employed in Nursing			**89.3** (81.7 U.S.)	
% of MDs Who Are International Medical Graduates (IMGs)			**6.0** (24.0 U.S.)	

RN= Registered Nurse, LPN= Licensed Practical Nurse, CNM= Certified Nurse Midwife, NP= Nurse Practitioner
CRNA= Certified Registered Nurse Anesthetist

Source: HRSA-BHPr.

Only six percent of physicians in Oregon are international medical graduates.

Table I-e.

NATIONAL HEALTH SERVICE CORPS (NHSC) FIELD STRENGTH			
Total Field Strength (FY 2003) * Includes mental/behavioral health officials	% in Urban Areas	% in Rural Areas	# Per 10,000 Population Living in HPSAs
59	**15**	**85**	**1.15** (0.49 U.S.)

Field Strength by Profession	
Physicians	**20**
Nurses	**10**
Physician Assistants	**6**
Dentists/Hygienists	**13**

HPSA= Health Professional Shortage Area

Source: BPHC-NHSC.

Oregon has more than twice as many National Health Service Corps professionals per 10,000 population than the U.S. as a whole.

Table I-f.

MANAGED CARE			
Penetration Rate of Commercial and Medicaid HMOs (as % of total population), 2000		**OR**	**U.S.**
		36.9	28.1
Profession	MCOs required by state to include profession on their provider panel*	Profession allowed by state to serve as primary care provider in MCOs	Profession allowed by state to coordinate primary care as part of a standing referral
Physicians	**No**	**Yes**	**No**
Nurses	**No**	**No**	**No**
Pharmacies	**No**	**No**	**No**
Dentists	**No**	**No**	**No**
State requires certain individuals enrolled in MCOs to have direct access to certain specialty (OB/GYN, etc.) providers.			**Yes**
State requires certain individuals enrolled in MCOs to receive a standing referral to a specialist (OB/GYN, etc.).			**Yes**

MCOs = Managed Care Organizations HMOs = Health Maintenance Organizations OB/GYN = Obstetrician/Gynecologist
* This requirement does not preclude MCOs from including additional professions on their provider panels.

Sources: HPTS, AARP.

Over thirty-six percent of Oregon residents receive their health care from an HMO.

Table I-g.

REIMBURSEMENT OF SERVICES					
	Profession	% Active Practitioners Enrolled	% Enrolled Receiving Annual Payments Greater Than $10,000[1]	Increase of 10% or More in Overall Payment Rates 1995-2000	Bonus or Special Payment Rate for Practice in Rural or Medically Underserved Area
Medicaid	Physicians	*	**N/A**	**No**	**Yes**
	NPs	**83.0**	**N/A**	**No**	**Yes**
	Dentists	**70.9**	**67.0**	**No**	**No**
	# of Enrolled Pharmacies				**938**
	% Change in Physician Fees (All Services), 1993-1998				**7.40**
	Recent State-Mandated Payment Increases				**No**
Medicare	# Active Practitioners Enrolled (2000)				**5,851**
	% Practitioners who Accept Fee as Full Payment (2003)				**93.4**

[1] Generally seen as an indicator of significant participation in the Medicaid program.
[2] Denominator number from HRSA State Health Workforce Profile, December 2000.
* Numerator data for physicians and nurse practitioners from state Medicaid agencies were unusable: many professionals were apparently double-counted, perhaps due to varying participation in different health plans.

N/A Data was not available

Sources: State Medicaid programs, Norton and Zuckerman "Trends", HPTS, AARP.

Medicaid fees for physicians increased between 1993 and 1998.

II. HEALTH PROFESSIONS EDUCATION

State efforts to help ensure an adequate supply of health professionals can be understood in part by examining data on the state's health professions education programs–counts of recent students and graduates, amounts of state resources invested in education, and other factors. State officials can gauge how well these providers reflect the state's population by also examining how many students and graduates are state residents or minorities. Knowing to what extent states are also investing in primary care education and how many medical school graduates remain in-state to complete residencies in family medicine is also important.

Table II-a.

UNDERGRADUATE MEDICAL EDUCATION			
# of Medical Schools *(Allopathic and Osteopathic)*	**1**	Public Schools	**1**
		Private Schools	**0**
		Osteopathic Schools	**0**
# of Medical Students *(Allopathic and Osteopathic)*	1998-1999	**419**	
	2000-2001	**424**	
# Medical Students per 100,000 Population[1]	1998-1999	**12.1**	
	2000-2001	**12.2**	
% Newly Entering Students (*Allopathic)* who are State Residents, 2002-2003		**54.8**	
Requirement for Students in Some/All Medical Schools to Complete a *Primary Care Clerkship*	By the State	**No**	
	By Majority of Schools	**Yes**	
# of Medical School Graduates *(Allopathic and Osteopathic)*	1998	**90**	
	2001	**104**	
# Medical School Graduates per 100,000 Population[1]	1998	**2.6**	
	2001	**3.0**	
% Graduates *(Allopathic)* who are Underrepresented Minorities, 1994-1998		**4.56** (10.5 U.S.)	
% 1987-1993 Medical School Graduates *(Allopathic)* Entering Generalist Specialties		**33.4** (26.7 U.S.)	
State Appropriations to Medical Schools *(Allopathic and Osteopathic)*, 2001-2002	Total	**$17.2 million**	
	Per Student	**$40,566**	

[1] Denominator number is state population from 2000 U.S. Census.

Sources: AAMC, AAMC Institutional Goals Ranking Report, AACOM, Barzansky et al. "Educational Programs", State higher education coordinating boards.

Just five percent of Oregon medical school graduates between 1994 and 1998 were underrepresented minorities.

Table II-b.

GRADUATE MEDICAL EDUCATION (GME)		
# of Residency Programs *(Allopathic and Osteopathic)*, 2001-2002[1]		**59**
# of Physician Residents *(Allopathic and Osteopathic)*, 2001-2002		**678**
# Residents Per 100,000 Population, 2001-2002		**19**
% Allopathic Residents from In-State Medical School, 2000-2001		**14.8**
% Residents who are International[2] Medical Graduates, 2000-2001		**5.8**
Requirement to Offer Some or All Residents a *Rural Rotation*	By the State	**No**
	By Most Primary Care Residencies	**No**
Medicaid Payments for Graduate Medical Education, 2002[3]		**$27.1 million**
	Payments as % of Total Medicaid Hospital Expenditures	**6.5** (8.0 U. S.)
	Payments Made Directly to Teaching Programs Under Capitated Managed Care	**No**
	Payments Linked to State Workforce Goals/ Goals of Improved Accountability	**No**
Medicare Payments for Graduate Medical Education, 1998[3]		**$27.3 million**

[1] Includes estimated number of osteopathic residencies/residents not accredited by the Accreditation Council for Graduate Medical Education.
[2] Does not include residents from Canada.
[3] Explicit payments for both direct and indirect GME cost.

Sources: AMA, AMA State-level Data, AACOM, State higher education coordinating boards, Henderson "Funding", Oliver et al. "State Variations."

Less than fifteen percent of allopathic residents in Oregon are from in-state medical schools.

Table II-c.

FAMILY MEDICINE RESIDENCY TRAINING			
# of Residency Programs, 2001-2002	**3**	# Residencies Located in Inner City	**2**
		# Residencies Offering Rural Fellowships or Training Tracks	**0**
# of Family Medicine Residents, 2001-2002			**18**
# Family Medicine Residents per 100,000 Population, 2001-2002[1]			**0.5**
% Graduates *(from state's Allopathic and Osteopathic medical schools)* who were First Year Residents in Family Medicine, 1995-2001			**21.3**
% Graduates *(from state's Allopathic medical schools)* Choosing a Family Medicine Residency Program Who Entered an In-State Family Medicine Residency, 1995-2001			**12.4**

[1] Denominator number is state population from 2000 U.S. Census.

Sources: AAFP, AAFP State Legislation, Kahn et al., Pugno et al. and Schmittling et al. "Entry of U.S. Medical School Graduates".

Only twelve percent of Oregon medical school graduates who chose family medicine residency program entered an in-state family medicine program.

Table II-d.

NURSING EDUCATION				
# of Nursing Schools	**16**	Public Schools		**14**
		Private Schools		**2**
# of Nursing Students[1]	**2,488**	# Associate Degree, 2001-2002		**983**
		# Baccalaureate Degree	2001-2002	**1,197**
			2002-2003	**1,292**
		# Masters Degree	2001-2002	**186**
			2002-2003	**170**
		# Doctoral Degree	2001-2002	**37**
			2002-2003	**43**
	# Per 100,000 population[2]			**71.6**
# of Nursing School Graduates[1]	**948**	# Associate Degree, 2002		**462**
		# Baccalaureate Degree	2001	**367**
			2002	**396**
		# Masters Degree	2001	**54**
			2002	**85**
		# Doctoral Degree	2001	**5**
			2002	**5**
	# Per 100,000 population[2]			**27.3**

[1] Annual figure for Associate, Baccalaureate, Masters and Doctoral students/graduates for most recent years available.

[2] Denominator number is the state population from the 2000 U.S. Census.

Sources: NLN, AACN, State higher education coordinating boards.

Enrollments and graduations for baccalaureate degree nursing programs rose from 2001 to 2002. Enrollments and graduations for master's level nursing programs fell in the same time period.

Table II-e.

PHARMACY EDUCATION			
# of Pharmacy Schools	**1**	Public Schools	**1**
		Private Schools	**0**
# of Pharmacy Students, 2002-2003	**290**	# Baccalaureate Degree	**0**
		# Doctoral Degree *(PharmD)*	**290**
	# Per 100,000 population*		**8.4**
# of Pharmacy Graduates, 2001-2002	**0**	# Baccalaureate Degree	**0**
		# Doctoral Degree *(PharmD)*	**0**
	# Per 100,000 population*		**0**

***** Denominator number is state population from 2000 U.S. Census.

Source: AACP.

Table II-f.

PHYSICIAN ASSISTANT EDUCATION			
# of Physician Assistant Training Programs, 2002-2003	**2**	Public Schools	**1**
		Private Schools	**1**
# of Physician Assistant Program Students, 2002-2003			**112**
# Physician Assistant Program Students per 100,000 Population, 2002-2003[1]			**3.22**
# of Physician Assistant Program Graduates, 2003			**N/A**
# Physician Assistant Program Graduates per 100,000 Population, 2003[1]			**N/A**

[1] Denominator number is state population from 2000 U.S. Census.

Sources: APAP, APAP Annual Report.

Table II-g.

DENTAL EDUCATION			
# of Dental Schools	**1**	Public Schools	**1**
		Private Schools	**0**
# of Dental Students, 2000-2001	**277**		
# Dental Students per 100,000 Population, 2000-2001*	**8.0**		
# of Dental Graduates, 1999-2000	**71**		
# Dental Graduates per 100,000 Population, 2000*	**2.0**		
State Appropriations to Dental Schools, 1997	Per Student: **$15,314**		
	As % of Total Revenue: **32.3** (31.6 U.S.)		

***** Denominator number is state population from 2000 U.S. Census.

Source: ADA.

Table II-h.

DENTAL HYGIENE EDUCATION			
# of Dental Hygiene Training Programs	**5**	Public Schools	**5**
		Private Schools	**0**
# of Dental Hygiene Program Students, 2001-2002	**233**		
# Dental Hygiene Program Students per 100,000 Population*	**6.7**		
# of Dental Hygiene Program Graduates, 2000-2001	**111**		
# Dental Hygiene Program Graduates per 100,000 Population*	**3.2**		

***** Denominator number is state population from 2000 U.S. Census.

Sources: ADHA, AMA Health Professions.

III. PHYSICIAN PRACTICE LOCATION

The following tables examine in-state physician practice location from two different vantage points: (1) of all physicians who were trained (went to medical school or received their most recent GME training) in the state between 1975 and 1995, and (2) of all physicians who are now practicing in the state, regardless of where they were trained. Complied from the American Medical Association's 1999 Physician Masterfile by Quality Resource Systems, Inc., the data importantly illustrates to what extent physician graduates practice in many of the state's small towns, using the rural-urban continuum developed by the U.S. Department of Agriculture.

PRACTICE LOCATION (URBAN/ RURAL) OF PHYSICIANS WHO RECEIVED THEIR MEDICAL SCHOOL TRAINING IN OREGON BETWEEN 1975 AND 1995.

Table III-a.

OREGON		
Number of physicians who were trained in OR and who are now practicing in OR **as a percentage of all physicians practicing in OR**.		**21.64**
Number of physicians who were trained in OR and are practicing in OR, **by practice location** (metro code[1]), **as a percentage of all physicians practicing in OR**.	#00	23.01
	#01	32.26
	#02	21.46
	#03	12.61
	#04	21.80
	#05	18.32
	#06	15.79
	#07	16.56
	#08	0.00
	#09	28.57
Number of physicians who were trained in OR and who are now practicing in OR **as a percentage of all physicians who were trained in OR**.		**47.57**
Number of physicians who were trained in OR and are practicing in OR, **by practice location** (metro code[1]), **as a percentage of all physicians trained in OR**.	#00	56.40
	#01	21.98
	#02	38.58
	#03	19.59
	#04	61.54
	#05	49.50
	#06	38.71
	#07	42.62
	#08	0.00
	#09	33.33

[1] 1995 Rural/Urban Continuum Codes for Metro and Nonmetro Counties. Margaret A. Butler and Calvin L. Beale. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture.

Codes # 00-03 indicate metropolitan counties:
00: Central counties of metro areas of 1 million or more
01: Fringe counties of metro areas of 1 million or more
02: Counties with metro areas of 250,000 - 1 million
03: Counties in metro areas of less than 250,000
Codes # 04-09 indicate non-metropolitan counties:
04: Urban population of 20,000 or more, adjacent to metro area
05: Urban population of 20,000 or more, not adjacent to metro area
06: Urban population of 2,500-19,999, adjacent to metro area
07: Urban population of 2,500-19,999, not adjacent to metro area
08: Completely rural (no place w population > 2,500), adjacent to metro area
09: Completely rural (no place w population > 2,500), not adjacent to metro area
NA: Not Applicable; no counties in the state are in the R/U Continuum Code.

PRACTICE LOCATION (URBAN/ RURAL) OF PHYSICIANS WHO RECEIVED THEIR MOST RECENT GME TRAINING IN OREGON BETWEEN 1978 AND 1998.

Table III-b.

OREGON[1]		
Number of physicians who received their most recent GME training in OR and who are now practicing in OR **as a percentage of all physicians practicing in OR**.		**32.45**
Number of physicians who received their most recent GME training in OR and are practicing in OR, **by practice location** (metro code[1]), **as a percentage of all physicians practicing in OR**.	#00	44.38
	#01	40.32
	#02	14.97
	#03	10.92
	#04	12.66
	#05	18.18
	#06	19.23
	#07	18.40
	#08	0.00
	#09	50.00
Number of physicians who received their most recent GME training in OR and who are now practicing in OR **as a percentage of all physicians who were trained in OR**.		**54.23**
Number of physicians who received their most recent GME training in OR and are practicing in OR, **by practice location** (metro code[1]), **as a percentage of all physicians trained in OR**.	#00	69.96
	#01	19.38
	#02	28.80
	#03	15.48
	#04	44.86
	#05	38.52
	#06	41.67
	#07	41.67
	#08	0.00
	#09	50.00

[1] 1995 Rural/Urban Continuum Codes for Metro and Nonmetro Counties. Margaret A. Butler and Calvin L. Beale. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture.

Codes # 00-03 indicate metropolitan counties:

00: Central counties of metro areas of 1 million or more
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Codes # 04-09 indicate non-metropolitan counties:

04: Urban population of 20,000 or more, adjacent to metro area
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06: Urban population of 2,500-19,999, adjacent to metro area
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09: Completely rural (no place w population > 2,500), not adjacent to metro area

NA: Not Applicable; no counties in the state are in the R/U Continuum Code.

IV. LICENSURE AND REGULATION OF PRACTICE

States are responsible for regulating the practice of health professions by licensing each provider, determining the scope of practice of each provider type and developing practice guidelines for each profession. The tables below illustrate the licensure requirements for each of the health professions covered in this study as well as additional information on recent expansions in scope of practice or other novel regulatory measures taken by the state.

Table IV-a.

PHYSICIANS	
LICENSURE REQUIREMENTS	Must have graduated from an approved school of medicine; have satisfactorily completed an approved internship, residency or fellowship; and have passed a written licensing examination.
LICENSURE REQUIREMENTS: *INTERSTATE TELE-CONSULTATION*	Law enacted in 1999 allows the Board of Medical Examiners to issue an out-of-state physician a license for the practice of medicine across state lines if the physician holds a full, unrestricted license to practice medicine in any other state and has not been the recipient of a professional sanction by any other state and otherwise meets the standards for Oregon licensure.
STATE MANDATES INDIVIDUAL PROFESSION PROFILES TO BE PUBLICLY ACCESSIBLE	**No**. Legislation was introduced in 2001 but not enacted.

Sources: State licensing board, HPTS.

Table IV-b.

PHYSICIAN ASSISTANTS	
LICENSURE REQUIREMENTS	Have successfully completed an approved curriculum in physician assistant training; Have passed an examination given by the National Commission on Certification of Physician Assistants (NCCPA).
RECENT STATE MANDATED EXPANSIONS IN SCOPE OF PRACTICE	***PRESCRIPTIVE AUTHORITY*** Can prescribe Schedule III-V with a supervising physician**.** *PHYSICIAN SUPERVISION* Law enacted in 1999 allows 1) physicians in underserved areas to supervise four physician assistants instead of two; 2) Physician Assistants to provide Medical services to ambulatory patients in underserved areas; and 3) Physicians to delegate emergency prescribing and dispensing authority to physician assistants.

Source: State licensing board.

Table IV-c.

NURSES	
LICENSURE REQUIREMENTS	**Registered Nurses (RNs)** Must have graduated from an approved nursing program of study and passed the NCLEX examination. Also , licensing by endorsement with license from another state. **Advanced Practice Nurses (APNs)** Must hold a current RN license in the state and must meet education requirements. NPs must have a masters degree in nursing; **Licensed Practical Nurses (LPNs)** Must have graduated from an approved nursing program and have passed relevant examination.
LICENSURE REQUIREMENTS: *FOREIGN-TRAINED NURSES*	Oregon has created a limited license for certain foreign nurses and foreign student nurses.
LICENSURE REQUIREMENTS: *INTERSTATE TELE-CONSULTATION*	**None.**
RECENT STATE MANDATED EXPANSIONS IN SCOPE OF PRACTICE	*PRESCRIPTIVE AUTHORITY* **Yes.** Nurse Practitioners can prescribe schedule II-V with a formulary. *PHYSICIAN SUPERVISION* CRNA can practice without medical collaboration when an anesthesiologist is not available. NPs can practice independently.
RECENT STATE REQUIREMENTS TO IMPROVE WORKING CONDITIONS IN CERTAIN INSTITUTIONS	**Yes.** A 2001 law requires hospitals to develop and implement nurse staffing plans and establish internal review processes. Another 2001 law prevents a nurse from being required to work more than 2 hours beyond a regularly scheduled shirt or 16 hours in a 24-hour time period.
STATE MANDATES INDIVIDUAL PROFESSION PROFILES TO BE PUBLICLY ACCESSIBLE	**No.**

Sources: State licensing board, AANA, ACNM, Pearson "Annual Legislative Update", HPTS.

Table IV-d.

DENTISTS	
LICENSURE REQUIREMENTS	Graduation from a accredited school of dentistry. Certification of having passed the dental examination administered by the Joint Commission on National Dental Examinations.
LICENSURE REQUIREMENTS: *INTERSTATE TELE-CONSULTATION*	**Full License.** Licensure for out-of-state dentists is granted by endorsement without further examination.

Source: State licensing board.

Table IV-e.

PHARMACISTS	
LICENSURE REQUIREMENTS	Have a degree from an American Council on Pharmaceutical Education (ACPE) accredited school. Have a passing score on the NAPLEX examination and a passing score on the Multistate Pharmacy Jurisprudence Examination. (MPJE)
RECENT STATE MANDATED EXPANSIONS IN SCOPE OF PRACTICE	Allowed to administer immunizations. Involved in collaborative drug therapy management.
STATE MANDATES INDIVIDUAL PROFESSION PROFILES TO BE PUBLICLY ACCESSIBLE	**No.**

Source: State licensing board.

Table IV-f.

DENTAL HYGIENISTS	
LICENSURE REQUIREMENTS	Graduation from an accredited dental hygiene program. Certification of having passed the dental hygiene examination administered by the Joint Commission on National Dental Examinations.
RECENT STATE MANDATED EXPANSIONS IN SCOPE OF PRACTICE	*PRESCRIPTIVE AUTHORITY* Dental hygienists may administer nitrous oxide with dentist supervision. *DENTIST SUPERVISION* A law allowing dental hygienists to practice unsupervised in state licensed facilities was passed in 1997.

Source: State licensing board, ADHA.

Glossary of Acronyms

CNM: Certified nurse midwife.

CRNA: Certified registered nurse anesthetist.

DEA: Drug Enforcement Agency.

HPSA: Health Professional Shortage Area

NCLEX: National Council Licensure Examination, administered by the National Council of State Boards of Nursing.

NP: Nurse practitioner.

RDHAP: Registered dental hygienist in alternative practice.

V. IMPROVING THE PRACTICE ENVIRONMENT

States have the challenge of not only helping to create an adequate supply of health professionals in the state, but also ensuring that those health professionals are distributed evenly throughout the state. Various programs and incentives are used by states to encourage providers to practice in rural and other underserved areas. The tables in this section describe Oregon's programs as well as the perceived effectiveness of these programs.

RECRUITMENT/ RETENTION INITIATIVES

Table V-a.

INITIATIVE	In Use	Perceived or Known Impact (1= high, 5= low)	Health Professions Affected					
			Physicians	Nurses	Pharmacists	Dentists	Dental Hygienists	Physician Assistants
FOCUSED ADMISSIONS / RECRUITMENT OF STUDENTS FROM RURAL OR UNDERSERVED AREAS	**Yes**	**2**	**X**	**X**				**X**
SUPPORT FOR HEALTH PROFESSIONS EDUCATION (stipends, preceptorships) IN UNDERSERVED AREAS	**Yes**	**4**	**X**	**X**	**X**	**X**		**X**
RECRUITMENT / PLACEMENT PROGRAMS FOR HEALTH PROFESSIONALS	**Yes**	**5**	**X**	**X**				**X**
PRACTICE DEVELOPMENT SUBSIDIES (i.e., start-up grants)	**No**							
MALPRACTICE PREMIUM SUBSIDIES	**Yes**	**N/A**	**X**					
TAX CREDITS FOR RURAL / UNDERSERVED AREA PRACTICE	**Yes**	**5**	**X**	**X**		**X**		**X**
PROVIDING SUBSTITUTE PHYSICIANS (*locum tenens* support)	**No**							
MALPRACTICE IMMUNITY FOR PROVIDING VOLUNTARY OR FREE CARE	**No**							
PAYMENT BONUSES / OTHER INCENTIVES BY MEDICAID OR OTHER INSURANCE CARRIERS	**No**							
MEDICAID REIMBURSEMENT OF TELEMEDICINE	**No**							

Source: State health officials.

N/A Data was not available

Oregon has employed many different initiatives to recruit and retain health professionals. State health officials cited focused admissions cited as having a moderately high impact.

LOAN REPAYMENT/ SCHOLARSHIP PROGRAMS *

Table V-b.

Program Type	Number of Programs	Number of Annual Participants	Average Retention Rate	Eligible Health Professions					
				Physicians	Nurses	Pharmacists	Dentists	Dental Hygienists	Physician Assistants
LOAN REPAYMENT	2	16	N/A	X	X				X
SCHOLARSHIP	0	0	N/A*						

* Includes only state-funded programs which require a service obligation in an underserved area. (NHSC state loan repayment programs are included since the state provides funding.)

N/A = Data was not available

N/A* = Data was not applicable.
Source: State health officials.

WORKFORCE PLANNING ACTIVITIES*

Table V-c.

ACTIVITY	In Use	Health Professions Affected					
		Physicians	Nurses	Pharmacists	Dentists	Dental Hygienists	Physician Assistants
COLLECTION / ANALYSIS OF PROFESSIONS SUPPLY DATA: FROM *PRIMARY* SOURCES (e.g., licensure renewal process; other survey research)	Yes	X	X	X	X	X	X
FROM *SECONDARY* SOURCES (e.g., state-based professional trade associations)	Yes	X					
PRODUCTION OF RECENT STUDIES OR REPORTS THAT DOCUMENT / EVALUATE THE SUPPLY, DISTRIBUTION, EDUCATION OR REGULATION OF HEALTH PROFESSIONS	Yes	X	X		X		X
RECENT REGULATORY ACTIONS INTENDED TO REQUIRE OR ENCOURAGE COORDINATION OF POLICIES AND DATA COLLECTION AMONG HEALTH PROFESSIONS GROUPS OR LICENSING BOARDS	No						

* One state health official supplied these responses. Therefore, data may be limited and may not accurately reflect all current workforce-planning activities in the state.

Oregon collects supply data from primary sources for all the major health professions.

VI. EXEMPLARY WORKFORCE LEGISLATION, PROGRAMS AND STUDIES

The following abstracts describe several of Oregon's recent endeavors to understand and describe the status of the state's current health care workforce.

Legislation and Programs

H-3353 (2001)
This law creates a Interim Task Force on Health Care Personnel for the purpose of studying and proposing recommendations for solving the growing shortages of health care workers in Oregon.

S-264 (1999)
This law amend existing law to allow physicians serving population groups in federally designated health professional shortage areas and federally designated underserved areas to supervise four physician assistants. The previous law limited the number of physician assistants a physician could supervise to two. The new law also allows physician assistants to provide medical services to ambulatory patients in a medical care setting where the physician does not regularly practice if certain conditions are met and the medical care setting is in a underserved of health professional shortage area.

S-322 (1999)
This law creates a limited license to practice registered or practical nursing for certain foreign trained nurses and foreign student nurses.

S-600 (1999)
This law defines the practice of medicine across state lines and prohibits a person from engaging in the practice of medicine across state lines.

Oregon Center for Nursing
Oregon Nursing Leadership Council, 2001
The Oregon Center for Nursing was created in 2001 by the Oregon Nursing Leadership Council for the purpose of developing a strategy for dealing with Oregon's nursing shortage. The Center functions as a clearinghouse for nursing workforce information, the collection and analysis of nursing data, the recruitment and retention of nurses, career counseling, development research and model programs; resources and funding, educational reform, and scholarships and grants.

Oregon Health Workforce Project
This project is designed for the purpose of collecting, managing, analyzing, and reporting data on Oregon's health workforce. The group makes determinations and recommendations about the appropriateness of health professional distribution in the state and develops strategies and actions to solve issues concerning Oregon's health workforce. The group has also produced profiled reports of the various health professions in the state.

Studies

Dentist Workforce: A Sourcebook
Oregon Health Workforce Project, 2002
This report by the Oregon Health Workforce project describes the results of a survey of licensed dentists in the state about employment status, demographic characteristics, educational background, worksite location, professional time allocation, specialty, career satisfaction, and future career plans.

Dental Hygienist Workforce: A Sourcebook
Oregon Health Workforce Project, 2002
This report by the Oregon Health Workforce project describes the results of a survey of licensed dental hygienists in the state about employment status, demographic characteristics, educational background, worksite location, professional time allocation, specialty, career satisfaction, and future career plans.

Nurse Practitioner Workforce: A Sourcebook
Oregon Health Workforce Project, 2002
This report by the Oregon Health Workforce project describes the results of a survey of licensed nurse practitioners in the state about employment status, demographic characteristics, educational background, worksite location, professional time allocation, specialty, career satisfaction, and future career plans.

Oregon's Nursing Shortage: A Public Health Crisis in the Making
Northwest Health Foundation, 2001
This report discusses the current state of the registered nursing workforce in Oregon and aims to develop potential initiatives that could impact the shortage. The study looks at the characteristics of the shortages in the state, including the severity and the types of facilities affected; the causes of the shortage; the projections of the nursing supply in the future; and strategies for maintaining an adequate nursing supply now and in the future.

Pharmacist Workforce: A Sourcebook
Oregon Health Workforce Project, 2002
This report by the Oregon Health Workforce project describes the results of a survey of licensed pharmacists in the state about employment status, demographic characteristics, educational background, worksite location, professional time allocation, career satisfaction, and future career plans.

Physician Workforce: A Sourcebook
Oregon Health Workforce Project, 2002
This report by the Oregon Health Workforce project describes the results of a survey of licensed physicians in the state about employment status, demographic characteristics, educational background, worksite location, professional time allocation, career satisfaction, and future career plans.

Physician Assistant Workforce: A Sourcebook
Oregon Health Workforce Project, 2002
This report by the Oregon Health Workforce project describes the results of a survey of licensed physician assistants in the state about employment status, demographic characteristics, educational background, worksite location, professional time allocation, specialty, career satisfaction, and future career plans.

Preliminary Report of The 2003 Physician Workforce Assessment
Oregon Medical Association, 2003
This is the preliminary report for a survey of over 10,000 physicians practicing in the state of Oregon. The report provides survey data on the demographic characteristics, distribution , practice patterns, and attitudes of physicians in the state.

VII. POLICY ANALYSIS

Statewide Organizations with Significant Involvement in Health Workforce Development/Analysis

- **Oregon Statewide Area Health Education Centers Program**
- **Oregon Department of Community Colleges and Workforce Development**
- **Oregon Health Sciences University**
- **Oregon Nursing Leadership Council / Oregon Center for Nursing**

Evidence of Collaboration: Moderate to Significant (largely associated with workforce data collection/analysis, profession education, and profession recruitment and retention)

Oregon, though quickly and steadily becoming more urban, remains largely rural in the eastern part of the state. As of the 2000 census, the proportion of the population that is minority or ethnic was about half the national average, although a rapidly rising Asian-origin population is evident.

Access to basic primary and dental health care in the state's health professional shortage areas (HPSAs) is variable. The percent of the population residing in primary care HPSAs is much below the national average; yet the percent living in dental HPSAs is significantly above national figures. The proportion of the non-elderly and children without health insurance in Oregon mirrors the national average. However, recent changes to the Oregon Health Plan, the state's Medicaid program, due to state budget problems and other issues, have resulted in a reduction in coverage for certain services and eligibility for many beneficiaries. In 2003, the Oregon Hospital Association sued the state over reduced Medicaid payments, and there are reports that many health care providers in rural areas who serve large Medicaid populations are threatening to leave.

As Oregon's budget woes deepened in 2003 and early 2004, voters were asked in a February 2004 special election to approve a ballot initiative (Measure 30) calling for a three-year income tax increase to fund state health care and other programs. The initiative was defeated, and state agencies (in addition to Medicaid) have begun preparing to make major cutbacks in programs and services.

Expected across-the-board cuts to most state programs are likely to force further funding reductions in many health professions training programs and provider recruitment and retention initiatives. The state's medical, dental and pharmacy schools are each publicly-supported as are nearly all of the Oregon's nursing education programs.

Anecdotal information also suggests that low Medicaid reimbursement rates have not had a significant impact on Medicaid participation by physicians and dentists. In 2003, for example, over 70 percent of all practicing dentists were enrolled in Medicaid, and of those, about two-thirds reported receiving annual Medicaid payments from services greater than $10,000.

However, many of Oregon's rural and poor urban areas continue to have difficulty recruiting primary care physicians and dentists, despite the fact that the state and federal governments have several programs to spur provider recruitment and retention in these communities. The field strength of National Health Service Corps personnel per 10,000 population residing in Oregon HPSAs was just over twice the national ratio in 2003. State officials rank state programs that now support health professions education in underserved areas as having a favorable impact on provider recruitment and retention. However, Oregon's tax credit program that encourages physicians and other health care professionals to practice in

rural areas received less than fully effective marks. Anecdotal reports suggests the program helps to retain many health professionals in these communities.

The state appears to suffer an overall shortage as well as maldistribution of physicians and pharmacists. Oregon's per capita supply of nurses, dentists and dental hygienists equals or exceeds national averages.

Concerns about current or emerging shortages of certain health professionals in the state—including nurses, physicians and various allied health personnel—prompted the legislature in 2001 to create the Interim Task Force on Health Care Personnel. The task force's charge was to propose recommendations for solving the growing shortages. The task force's interest in better understanding the status of the Oregon's health workforce led the Governor to convene a summit in 2002 to highlight best and promising practices to improve the health workforce, and supported the state's Area Health Education Centers program to produce a series of profession-specific health workforce profiles in 2002.

Medicine

Oregon's supply of physicians is flat or in decline for the first time since the 1970s. Reports suggests that the state's physician supply is hampered by the fact that a significant proportion of graduates of Oregon's one medical school ultimately leave the state to practice and only about a quarter of all practicing physicians in the state went to medical school in Oregon.

Reports of many physicians (particularly rural) leaving the state appear to be connected with growing concerns by physicians with dramatic increases in malpractice insurance premiums since the late 1990s, when the state lifted its cap on non-economic damages and made other changes. To address the problem, a 2003 bill passed by the legislature subsidizes a proportion of malpractice insurance premiums for obstetricians and other physicians that practice in rural areas of the state where physicians qualify for the rural tax credit. Funds to support the subsidy are due to come from the state-owned workers' compensation insurer.

Nursing

Another outgrowth of the work of the Interim Task Force on Health Care Personnel was a greater awareness of a growing nurse shortage in Oregon and the proposal of a series of initiatives to improve nursing supply. A 2001 report funded by the Northwest Health Foundation also provided substance to the growing problem of a nurse shortage in the state. In 2001, the state established a nursing loan repayment program designed to recruit more nurses to targeted rural areas. More recently created workforce task forces created by the Oregon Hospital Association and the statewide workforce investment board also established initiatives to improve recruitment strategies and increase supply. Although the state's changing demand for and supply of nurses is becoming better understood, there is a consensus that the growing nursing shortage in Oregon, like elsewhere, is largely associated with an insufficient capacity of nurse training programs (associated with shortages of faculty, space and other resources) to educate more nurses. Increasing numbers of qualified applicants are being turned away from nursing schools.

This realization was addressed, beginning in the early 2000's, with the formation of a coalition of major nursing groups in the state whose main aim was to improve nurse recruitment. The Oregon Nursing Leadership Council as it was called included the Oregon Nurses Association, Board of Nursing, and a host of nurse executives and representatives of registered nurse training programs. The Council developed a strategic plan to address the state's nursing shortage which included objectives to double enrollment in state's nursing programs by 2004 and redesign nursing education, develop and implement nurse staffing models, and create a statewide nursing center (Oregon Center for Nursing) to coordinate implementation and evaluation of the plan. A 2003 law passed by the legislature provided an oversight

committee (Oregon Nursing Shortage Coalition Committee) and support to the state's nursing schools to carryout many of nursing education reforms proposed by the Council. Due to state budgetary problems, no funds were provided for this initiative by the 2003-05 budget. The effort to expand the number of nurses trained has involved the creation of new partnerships between nursing programs at Oregon Health Sciences University and the state's 11 community colleges which offer nurse training. These partnerships operate under the Oregon Consortium for Nursing Education.

Dentistry

Although there is growing concern that Oregon faces an overall shortage of dentists in the future, oral health experts agree that the state's dental workforce shortage currently is largely a maldistribution problem. The maldistribution of dentists and dental hygienists in rural areas is becoming particularly acute. Similar to other states, a large number of dentists are nearing retirement and many retiring rural dentists are unable to find someone to take over their practice.

Recent state budget shortfalls have forced Oregon's dental school to continue to depend less on state appropriations and to raise tuition and seek revenues from other states in the region without a dental school by offering more class positions for out-of-state students. Applicant demand for the school remains substantial and about two-thirds of all applicants are in-state residents. About half of the school's graduates remain in-state to practice.

Although the overall supply of dental hygienists in Oregon appears to be adequate, the demand for hygienists in rural areas of the state, however, looks to be exceeding their supply. The recent closure of the state's only four-year hygiene training program at Oregon Health Sciences University fueled concerns by dentists in rural areas. A small number of hygienists in the state now are able to practice with less dentist supervision in certain settings.

Pharmacists

The state's overall shortage of pharmacists appears to be lessening, although major concerns of a shortage in rural areas of the state persist. A significant proportion of the graduates of the state's one school of pharmacy leave the state to practice, and the school appears unable to replace the aging workforce of pharmacists in the state's rural counties. Also, recent reductions in Medicaid payment rates and the numbers of beneficiaries and discussion of further cuts in reimbursement have reportedly forced many pharmacies in rural areas to close.

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